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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

May 3, 1995

Mr. William F. Caton, Secretary  
Federal Communications Commission  
Room 222  
1919 M. St., NW  
Washington, DC 20554

RE: IB Docket No. 95-22, RM. 8355 -- In the  
Matter of Market Entry and Regulation  
of Foreign-Affiliated Carriers

Dear Mr. Caton:

Enclosed, please find for filing with the Commission the original and four copies of the comments of the Economic Strategy Institute on the above matter. We have also attached five copies of ESI's telecommunications study, *Crossed Wires*, for submission into the record.

Respectfully submitted,

Clyde V. Prestowitz  
President, Economic Strategy Institute

Erik R. Olbeter  
Research Associate

Enclosures

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

May 2, 1995

The Honorable Reed E. Hundt  
Chairman  
Federal Communications Commission  
1919 M St., NW  
Room 814  
Washington, DC 20554-0001

Dear Mr. Chairman:

The Economic Strategy Institute (ESI) is writing as an organization concerned about America's economic future. ESI is a non-profit research organization dedicated to defining a new American economic agenda for the twenty-first century. By challenging outmoded doctrines and examining the links between domestic and international economic policies, technological prowess, and global securities issues, ESI promotes the development of an integrated strategy that will halt erosion of the U.S. economic base and assure the future of America's unique promise.

The Federal Communications Commission is currently reviewing a rulemaking proposal, RM 8335, crucial to the future of the U.S. telecommunications industry and U.S. consumers. Your decision in this matter will dramatically affect the creation of a level playing field in the global communications market and the pace at which U.S. firms are permitted to compete overseas.

The Commission should be commended for addressing the often-neglected issues of asymmetrical market access and anti-competitive behavior. Many academicians and government organizations tend to equate the public interest only with short-term consumer sovereignty and fail to consider the impact of anti-competitive behavior and asymmetrical market access on future consumer welfare and the U.S. industrial base.

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In the telecommunications industry, there is clear evidence of asymmetrical market access, the potential for anti-competitive behavior in the global telecoms market (absent government regulation), and the benefits of opening foreign markets to U.S. firms. In a global industry dominated by monopolies, firm U.S. government action is both necessary and justified. ESI believes this NPRM is a crucial step in addressing these issues.

There is almost unanimous agreement among knowledgeable observers that U.S. telecommunications firms are the most efficient, innovative, and reliable providers in the world. This competitiveness has been bolstered, in part, by government policies encouraging competition in the U.S. market, from both domestic and foreign firms. Unfortunately, as the Commission correctly pointed out in the NPRM, most foreign governments prohibit foreign participation in their telecom markets. In fact, of the 26 countries ESI examined in our telecom study, *Crossed Wires*, only the United Kingdom and New Zealand offer foreign firms opportunities comparable to those offered to foreign firms by the United States.

Asymmetrical market access exists -- and it poses serious threats to competitive telecommunications markets as they become increasingly global in nature. Now more than ever, businesses are demanding seamless services from a single carrier, and eventually residential users will demand the same. Firms which can provide this ubiquitous service will dominate the market; firms that cannot will be relegated to secondary status.

Currently, foreign firms can enter the U.S. market, either directly or indirectly, and offer international services to multinational firms. These foreign firms possess the power and the incentive to discriminate against other competitors in ways which no set of regulations, regardless of detail and scope, can effectively halt. The only way to prevent these discriminatory practices and ensure a fair, competitive market that maintains consumer sovereignty is to prevent the entry of monopolies into the U.S. market. In short, monopolies, when given a chance to leverage their monopoly power, will do what comes logically: discriminate against competitive firms to drive them out of the market.

ESI agrees wholeheartedly with the assertion made in the NPRM that allowing foreign carrier entry into the U.S. international service market will further consumer interests by providing additional competition. Furthermore, increased foreign competition and investment in the U.S. market forces U.S.-based firms to become more productive, innovative, and responsive to customer needs. However, the nation as a whole benefits only when the competition created by foreign firms is fair and driven by classic market

and economic relationships. Otherwise, long-term prosperity is traded for short-term consumer gain.

According to the ITU, global telecom revenue exceeded \$455 billion in 1993 and may reach \$530 billion by the end of this year. The global market for multinational business communication services will generate an estimated \$25 billion by the end of the decade. International traffic is currently the fastest growing sector of the wireline market in all developed countries. International service provision now accounts for over ten percent of U.S. industry revenue and could generate as much as 15 percent of industry revenue by the year 2000. Continued growth in the U.S. telecommunications services industry is becoming increasingly dependent on the ability of U.S. firms to exploit the opportunities in foreign markets. Yet, many foreign markets are experiencing much higher growth rates (in subscribers, usage, and revenue) than the U.S. market, due to asymmetrical market access.

The United States would realize considerable benefits from greater access to foreign markets. First, consumers would benefit in the long run from a fair, competitive market. Second, U.S. firms would reap tremendous profits from greater access to foreign markets. If U.S. carriers were permitted to become international, facilities-based operators abroad, ESI estimates U.S. carriers could increase their revenue by \$12.93 billion annually. In 1992, if U.S. firms had captured just ten percent of foreign telecom markets, U.S. carrier revenue would have been \$28.8 billion greater and approximately \$2 billion would have been repatriated back to the United States. What is striking about these figures is the sheer magnitude of the profit potential. Furthermore, U.S. equipment exports would increase as U.S. firms begin building facilities overseas.

In addition to the issue of comparable market access, ESI believes there is another issue the FCC must address in the NPRM -- the large, unjustified monopoly profits reaped from U.S. consumers through above-cost accounting rates. The fact that accounting rates are above cost is undisputed and has been recognized by the Commission in previous dockets. Despite the Commission's efforts to move toward cost-based accounting rates through benchmarking and conditioning approval (e.g. MCI-BT), accounting rates remain far above cost and U.S. consumers continue to pay for the inefficiencies of foreign carriers. The telecommunications services trade deficit topped \$3.3 billion in 1993 and could grow to \$5 billion by the end of the decade. ESI estimates at the current pace U.S. citizens will cumulatively pay over \$27 billion in accounting rate overcharges this decade.

These statistics show stronger measures are needed to bring down accounting rates. Competition alone will not solve the problem. Even if foreign countries opened their markets today, it would take years for effective competition to develop and even longer for accounting rates to fall. The United Kingdom is a perfect example. Despite duopoly competition for ten years, accounting rates are still estimated to be four times cost. Knowing U.S. citizens will log more international minutes than citizens in their own country, foreign firms have an inherent incentive to demand above-cost accounting rates, and will never adopt cost-based rates unless an equally persuasive incentive is offered in return. One incentive strong enough to stop the extraction of monopoly profits from U.S. consumers is Sec. 214 licensing, and it is crucial that the Commission demand cost-based accounting rates when considering foreign license applications.

Another incentive the United States could offer foreign countries is leniency in the application of the Sec. 310(b)(4) ownership limit. This policy would encourage foreign firms with a presence in the United States to pressure their governments for faster liberalization and would provide an added incentive for foreign firms wishing to enter the U.S. market. Although adopting a standard, numerical ownership restriction for all firms provides consistency, it does not take into account the differences existing in the scope and nature of U.S. firm access to foreign markets. Perhaps more importantly, a single standard fails to offer foreign firms and governments an incentive to continue the liberalization process and to open their markets further. Therefore, the Commission should leave itself discretionary authority to determine acceptable foreign participation based in part on comparable market access.

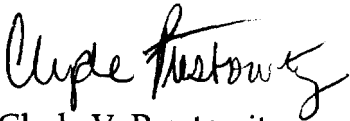
ESI is also concerned about anti-competitive behavior on the part of foreign monopolies in the U.S. market for resale services. ESI concurs with the Commission's rationale for not including resale services in this rulemaking, and we support your effort to minimize unnecessary regulations. However, when dealing with monopolies, there is always the potential for anti-competitive behavior which could adversely affect U.S. consumers and U.S. telecom firms. Although avoiding excessive regulation is prudent at this time, ESI urges the Commission to take strong action against future anticompetitive behavior in the resale market if such behavior is shown to exist, and to reexamine the need for more focused regulatory monitoring if such behavior becomes pervasive.

Commissioner Quello raised the issue of timing, concerned that the FCC review of Section 310(b) may not be appropriate in light of congressional efforts to revise Sec. 310 (H.R. 514). While congressional review should be welcomed and encouraged, this issue demands immediate attention, and we worry that legislation will either be

delayed or embroiled in partisan politics resulting in laws not adequately addressing the key issue. Far too often in Washington pro-active policies are delayed or never implemented because government agencies worry more about stepping on toes than addressing legitimate policy questions. The matter of market entry is clearly within the scope of the FCC authority, and this issue requires immediate attention.

In conclusion, ESI believes the Commission should implement the rules stated in the NPRM as soon as possible. Consideration of market access issues during Sec. 214 licensing and Sec. 310(b) proceedings will create fair competition in the global market for telecom services, prevent the possibility of anti-competitive behavior, and open opportunities for U.S. firms overseas. It is imperative the Commission also take this opportunity to stop the gouging of American consumers via above-cost accounting rates.

Sincerely,



Clyde V. Prestowitz  
President, Economic Strategy Institute



Erik R. Olbeter  
Research Associate

cc:	Commissioner Andrew C. Barrett	(Room 826)
	Commissioner Rachelle B. Chong	(Room 844)
	Commissioner Susan Ness	(Room 832)
	Commissioner James H. Quello	(Room 802)

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# CROSSED WIRES

**How Foreign Regulations and  
U.S. Policies Are Holding Back  
the U.S. Telecommunications  
Services Industry**

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# **CROSSED WIRES**

## **How Foreign Regulations and U.S. Policies Are Holding Back the U.S. Telecommunications Services Industry**

**Erik R. Olbeter  
Lawrence Chimerine**

**The authors would like to thank ESI Research Associate Steven J. Holden,  
ESI Editor Samuel L. McCoy, and ESI Research Assistant Laura Adkins for  
their invaluable contributions to this project.**



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## EXECUTIVE SUMMARY

This study examines the changes taking place in the telecommunications services industry both here and abroad, the opportunities emerging from these changes, and the factors affecting the ability of U.S. carriers to take advantage of these opportunities. We conclude that current domestic, foreign, and international regulations restrict the ability of U.S. firms to seize these opportunities and, consequently, limit the ability of the telecommunications industry to generate high-wage, American jobs.

This study proposes changes in domestic regulations to spur competition throughout the telecommunications services industry and thereby lower prices, stimulate innovation, and improve the international competitiveness of all U.S. firms. The study also recommends a proactive, international negotiating position to increase the opportunities available to U.S. telecommunications services firms in foreign nations. Finally, the study advocates abandoning the current international service operating agreement in favor of a cost-based, non-discriminatory agreement.

The following is a summary of the findings.

### **Growing Opportunities**

- The market for telecommunications services in foreign countries is growing at an unprecedented rate. In 1993, the global market generated \$455 billion in revenues and is expected to generate \$490 billion in 1994. The global telecommunications services industry will generate almost \$1 trillion in revenue by the end of the decade.
- This growth translates into lucrative opportunities, particularly in foreign countries, for efficient telecommunications firms. While many sectors of the U.S. market are approaching maturity, many foreign markets are in

the primary stages of development and exhibit considerable latent demand. In some countries, basic service growth is five times that of the United States, mobile subscriber bases are doubling annually, and satellite use is doubling biannually. As a consequence, future growth in the U.S. telecommunications services industry is becoming increasingly dependent on the ability of U.S. firms to exploit the unparalleled opportunities presented in foreign markets.

### **U.S. Competitiveness**

- U.S. firms are well positioned to take advantage of these opportunities. As a result of U.S. government policies which promoted competition long before most other countries, U.S. firms today are the most competitive in the world. Intense domestic competition has forced U.S. firms constantly to innovate, improve efficiency, and provide high-quality services.
- U.S. wireline firms are consistently ranked number one in the world by the three main industry measures of international competitiveness — revenue per employee, access line per employee, and measures of labor and capital productivity. U.S. cellular firms have similarly proven themselves to be among the most efficient in the world. In foreign markets, U.S. cellular operators have been awarded 49 percent of all cellular licenses in countries where they have been allowed to bid.

### **Foreign and International Regulatory Barriers**

- Despite the world-class efficiency of U.S. firms and their publicly-announced intentions of expanding overseas operations, U.S. direct investment is concentrated in a small number of countries and is notably absent from some of the most lucrative markets. No U.S. firm is a major basic telecommunications services provider in the European Union (E.U.) or Japan, the second and third largest markets in the world, respectively. U.S. cellular providers do provide services in E.U. member states but are, oddly, minor players in the Japanese market. The dearth of U.S. participation in key foreign markets can be explained by prohibitive government regulations that restrict U.S. firms from exploiting their competitive advantage in telecommunications services.

- While the United States maintains one of the most open markets and takes extraordinary measures to ensure a level playing field, foreign countries are characterized by monopoly providers and regulatory environments hostile to foreign competition. In every Asia-Pacific country, except possibly New Zealand, foreign firms are denied the same opportunities that the United States grants to foreign firms in its market. Every European Union member state, except the United Kingdom, places strict limits on foreign participation. Foreign barriers to U.S. direct investment are also thwarting the ability of U.S. firms to compete freely in developing markets.
- Many of these same foreign governments restrict U.S. firms from providing international services originating in their countries, while their firms are allowed to participate freely in the U.S. market. These prohibitions have two effects: U.S. firms cannot compete in the market for international services originating in those countries, and U.S. firms are forced to form alliances with foreign firms in order to provide the global, seamless service that multinational firms demand. Foreign governments, in essence, are guaranteeing their domestic firms a piece of the market for global, seamless services at the expense of U.S. firms.
- The international telecom services settlement system, known as the accounting rate system, is also used by foreign firms to exploit U.S. consumers and firms. Due to the above-cost levels in the accounting rate system, the United States perpetually posts an annual trade deficit-- now in excess of \$4 billion -- in telecommunications services.
- Foreign firms use this mechanism to overcharge U.S. consumers billions of dollars annually and, furthermore, discriminate against the United States by charging significantly more for terminating calls from the United States than for calls originating in other countries, despite small cost differentials. The Economic Strategy Institute estimates that U.S. consumers were overcharged between \$1.7 and \$2.1 billion dollars in 1992.

## **Consequences of the Current Regulatory Environment**

- Foreign regulations are likely to restrict U.S. participation in their markets for the foreseeable future. The conventional wisdom that foreign government deregulatory plans will foster fair competition and allow U.S. firms to enter foreign markets freely in the near future is erroneous. This belief is refuted by the history of the regulatory reform process, the specifics of current regulatory proposals, and logic. The most common deregulation proposal excludes U.S. firms as long as possible in an effort to promote domestic industry and to insulate monopoly operators.
- Foreign barriers have substantial negative consequences for the U.S. economy. Job creation in the U.S. telecommunications industry is retarded by foreign restrictions on U.S. foreign direct investment. The U.S. economy benefits from greater access to foreign markets in two ways: U.S. firms would repatriate income from foreign operations, and U.S. telecommunications exports would rise with additional U.S. service licenses.
- The Economic Strategy Institute estimates that U.S. firms would capture a minimum foreign market share of 10 percent, and potentially 25 percent, if these markets were open to U.S. firms. The impact of such foreign market penetration would be substantial. If, in 1994, U.S. firms were to capture 25 percent of non-U.S. telecommunications services markets, U.S. firm revenue would increase by \$72 billion, and approximately \$3.61 billion in net income would be repatriated to the United States.
- As foreign markets expand, the repatriation effect will grow significantly. If U.S. firms maintain this share of foreign telecommunications services markets between 1992 and 2000, U.S. firms would accumulate over \$874 billion in net revenues. Foreign service licenses for U.S. firms also provide a boon for U.S. telecommunications equipment manufacturers and would help lower the persistent U.S. trade deficit.
- The above-cost charges generated by the accounting rate system overcharge U.S. consumers billions of dollars annually. Current

accounting rate balances suggest that by the end of the decade U.S. consumers will be overcharged a cumulative \$27 billion by foreign firms, if the accounting rate system is not changed.

## **Recommendations**

- If the United States wishes to enjoy the benefits of having the most internationally competitive telecommunications services industry, the U.S. government must do three things: complete the deregulation of the domestic market; adopt a proactive, incentive-based strategy to open foreign markets; and institute a cost-based, non-discriminatory international settlement system.

## **Domestic Deregulation**

- The superior international competitiveness of U.S. firms is a direct result, among other things, of U.S. government policies encouraging competition in the domestic market. If domestic deregulation is delayed and foreign countries push forward with reform, U.S. firms may become less competitive relative to their foreign counterparts, costing the U.S. economy thousands of jobs.
- Failure to pass comprehensive deregulation in the United States will decrease the pressure on foreign governments to liberalize and open their markets. The sole impetus for telecom liberalization in most countries originates from foreign businesses fearing that their firms will become less competitive relative to U.S. firms as a result of a less liberalized domestic telecom market. The longer the U.S. Congress delays passing telecom deregulation, the less foreign firms have to fear and, as a consequence, the less likely foreign governments are to open their markets.
- In order to maximize competitive pressures, deregulation should permit any firm with a network in place to provide any telecommunications service it can. There is no reason electric utility companies, cable TV providers, and wireless firms should be restricted from providing any service once adequate safeguards are established to ensure competitive



behavior. Deregulation should also encourage new firms to enter the market by mandating interconnection and establishing a transition period during which competition will be encouraged in non-competitive markets.

- In an effort to promote efficiency, the U.S. government should immediately adopt price cap regulation in place of the current rate of return regulation. Unlike rate of return regulations, price caps encourage firms to improve their efficiency and lower their costs.
- Congress should also investigate the potential for overinvestment in the local exchange. Although, in general, a competitive telecommunications infrastructure is more efficient than a monopolistic one, introducing competition into the entire local network could lead to overinvestment. However, it must be stressed that the longer federal officials wait to deregulate closed markets, the greater the loss to U.S. consumers.

#### **Opening Foreign Markets**

- The U.S. government must adopt an aggressive, incentive-based policy to open foreign markets to U.S. foreign direct investment. Successfully concluding the ongoing General Agreement on Trade in Services (GATS) negotiations should be a top priority of both the White House and the Office of the U.S. Trade Representative.
- By negotiating for the adoption of the following set of principles, the government can create greater opportunities for U.S. firms and ensure that U.S. firms compete on a level playing field in foreign countries:
  1. Countries must permit foreign firms to operate as both resellers and facilities-based operators.
  2. Countries must guarantee foreign firms access to their public switched network on terms that are non-discriminatory, cost-based, and publicly disclosed.
  3. Countries must agree to the principles of interoperability.

4. Countries must ensure that foreign ownership is not limited by quantitative ceilings or by requirements that foreign firms enter joint ventures.
  5. Countries must agree to establish domestic safeguards against cross-subsidization.
  6. Customers must also be guaranteed equal access to foreign and domestic telecommunications providers.
- In order to maximize the probability of reaching an agreement, U.S. telecom policy must be incentive-based. The FCC should adopt a policy making comparable market access a key factor in their decision to grant or deny foreign entry to the U.S. market. This policy should not set rigid comparability standards effectively excluding all foreign firms from the U.S. market: the U.S. economy benefits when foreign telecom firms, operating in liberalized native telecom markets, compete in the U.S. market. Instead, the FCC should review a general list of market access issues when considering foreign petitions to enter the U.S. market. Such a policy will permit foreign firms with liberalized home markets to compete in the United States while encouraging foreign countries to open their markets to U.S. firms.
  - Opening foreign telecom markets must remain a top priority of the U.S. government after the conclusion of the GATS -- regardless of the negotiation's outcome. If the United States cannot conclude a successful GATS agreement, the United States should actively attempt to secure smaller multilateral agreements with like-minded countries, based on the above-stated principles. The USTR should begin these negotiations immediately following the GATS negotiating deadline -- even if the negotiations are extended beyond the original two year time frame. The longer foreign markets remain closed, the greater the loss to the U.S. economy.

#### **Changing the Accounting Rate System**

- The U.S. government must also launch an aggressive campaign to eliminate the accounting rate system in favor of a cost-based, transparent,

non-discriminatory international settlement system. Under a new system, foreign firms would assign a single, cost-based charge to each incoming international call, regardless of its origin.

- While a new international settlement system is being negotiated, the FCC should assume a more public and vocal role in advocating accounting rate reductions. The FCC should construct surrogate models of true international transmission costs, as a rough guide to the appropriate accounting rate, and advocate that foreign monopolies lower accounting rates to be more in line with the surrogate.

## INTRODUCTION

The game has begun. Telecommunications providers from every nation are gearing-up to provide worldwide telecommunications services in fierce competition with one another. The U.S. telecommunications industry would appear to be the team to beat -- efficient, innovative, and technologically advanced. The one thing no one would expect is that, in this game, U.S. telecommunications providers might end up watching from the sidelines.

The telecommunications services industry is in a period of tremendous growth. Around the globe, new markets are emerging and expanding faster than many experts believed possible. U.S. telecommunications services firms, which are among the world's most efficient and technologically innovative, are well-positioned to compete in foreign and emerging global markets. However, a slew of foreign and international regulations which restrict and constrain U.S. firm participation are preventing U.S. firms from taking advantage of their competitive position. This study analyzes the evolving telecommunications services industry and how domestic, foreign, and international regulations are influencing its change.

The term telecommunications services typically refers to four types of communication services: basic voice services, mobile communications, satellite services, and enhanced services. Basic voice services are traditional, "plain old telephone" services including the local, long distance, and international transmission of telephone, telex, telegraph traffic, and raw data via either a switched or leased line network.<sup>1</sup> Mobile communications are wireless services such as cellular phones, pagers, and personal communications services (PCS), and satellite services are defined as any non-broadcast service transmitted via

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<sup>1</sup>Leased-line services allow businesses to create their own private network on which they can transmit an unlimited amount of data or voice traffic at a flat rate.

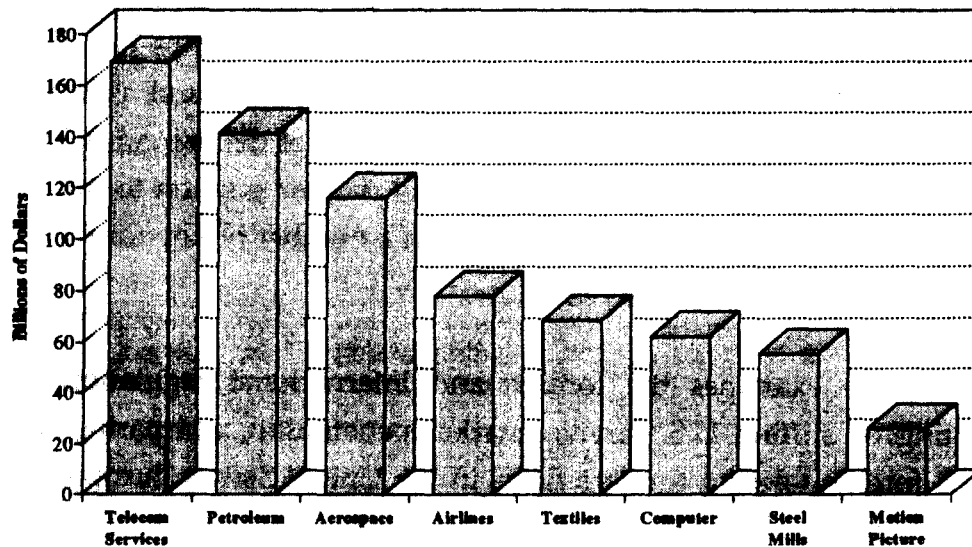
satellite.<sup>2</sup> Enhanced or value-added services, which add value to the basic transmission of information, include storage and forwarding, e-mail, on-line databases, and financial transaction processing services.

One can scarcely overestimate the importance of a healthy, innovative telecom services industry (the Industry) to the U.S. economy. The Industry ranks as one of the U.S.'s largest economic sectors, with annual revenues surpassing petroleum refining, computers, and aerospace. 1992 revenue reached \$169 billion, which not only exceeds many other U.S. industries, but is also considerably larger than the entire GDP of most nations. (See Figure i.1 below) The Industry employed roughly one million Americans in 1992, and while some high-profile firms have reduced their workforce (particularly the Baby Bells), others, particularly mobile and enhanced service providers, have been expanding their payrolls at a rapid pace. Furthermore, the Industry, as a heavy user of advanced electronics and computer systems, is indirectly responsible for many high-wage jobs in the high-tech capital goods industry.

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<sup>2</sup>Issues that relate to telecommunications equipment are beyond the scope of this study and will not be covered.

**Figure i.1: The Relative Size of the U.S. Telecommunications Services Industry, 1994.** Source: Department of Commerce



Not only is the Industry one of the largest sectors in the U.S. economy, but it also produces a critical input for every U.S. business. A high-quality, low-cost, and innovative telecom services industry is therefore essential to the economic success and international competitiveness of all U.S. industries. A more efficient, more innovative U.S. telecommunications services industry directly translates into greater overall economic efficiency and subsequently, an improved national trade balance.

The challenge facing policy makers today is to create a regulatory environment that promotes competition in the domestic market (and hence the competitiveness of U.S. firms) and expands foreign market opportunities for U.S. firms. This paper recommends policy actions which will improve both domestic economic efficiency and foreign opportunities for U.S. firms.

Chapter One examines the size, growth, and emerging trends of the world's telecom services markets. Foreign opportunities in telecom services, particularly opportunities in Europe, Latin America, and Asia-Pacific nations, are outlined and discussed in detail. The data reveal that foreign markets are becoming increasingly important to the U.S. telecom services industry's growth and prosperity.

Chapter Two assesses the ability of U.S. firms to compete in foreign telecom services markets, reviewing the regulatory history of the U.S. telecom market and identifying the factors which have promoted the efficiency and competitiveness of U.S. firms. The chapter examines the steps U.S. firms have taken to improve their efficiency and competitiveness, and compares U.S. providers with their international rivals. In a review of the breadth and depth of U.S. firm participation in foreign markets, the chapter goes on to illustrate that U.S. firms are curiously inactive, or absent, in a number of key foreign markets, despite their competitive advantage.

Chapter Three examines the foreign and international regulations that are prohibiting or stifling U.S. foreign market penetration, comparing the access afforded foreign telecom services firms in the United States, Europe, and Asia-Pacific nations, and considering the degree to which foreign and domestic firms operate on a level playing field. The standard, international service operating agreement for completing international calls is also examined to discern its impact on U.S. service exports and participation overseas.

Chapter Four analyzes the prospect for real changes in foreign regulations that would permit greater U.S. participation in foreign markets. It challenges the conventional wisdom that foreign governments will inevitably open their markets and argues that most will continue protecting their incumbent operators. The chapter then discusses the consequences of foreign regulations and the international service operating agreement for U.S. firms and consumers.

Chapter Five recommends a proactive policy program for promoting the competitiveness of U.S. telecom services firms and opening foreign markets. It discusses the different policy options being debated, and, based on the preceding analysis, recommends a policy course that would maximize the opportunities available to U.S. firms and, most importantly, maximize the benefits of the telecommunications revolution to the U.S. economy.

# CHAPTER I: TELECOMMUNICATIONS SERVICES MARKETS

## *A Global Overview*

Never before in the history of the telecom services industry have the opportunities in foreign markets been so potentially lucrative. More countries are engaged in major efforts to enhance, expand, or restructure their telecom market than at any other time. In fact, countries representing more than half the world market have initiated major plans to upgrade or expand their telecom infrastructure. Increasingly, countries are realizing that maintaining a ubiquitous, advanced, and reliable telecom infrastructure is vital to their future economic growth, efficiency and prosperity. U.S. firms, who are among the most competitive telecom firms in the world, stand to make tremendous profits in overseas markets -- if they are permitted to compete on a level playing field.

### **A. The Global Market**

#### **1. Overview**

The global telecom services industry generated \$455 billion in revenues in 1993 and is expected to exceed \$490 billion in 1994.<sup>1</sup> The vast majority of industry revenues (approximately 84 percent) are generated from basic voice services, i.e. local, domestic long distance, and international wireline traffic. Mobile communications, satellite, and enhanced services generate a small but rapidly increasing portion of the industry's revenues. In 1994, the global market for enhanced services has an estimated value of \$45 billion while mobile and

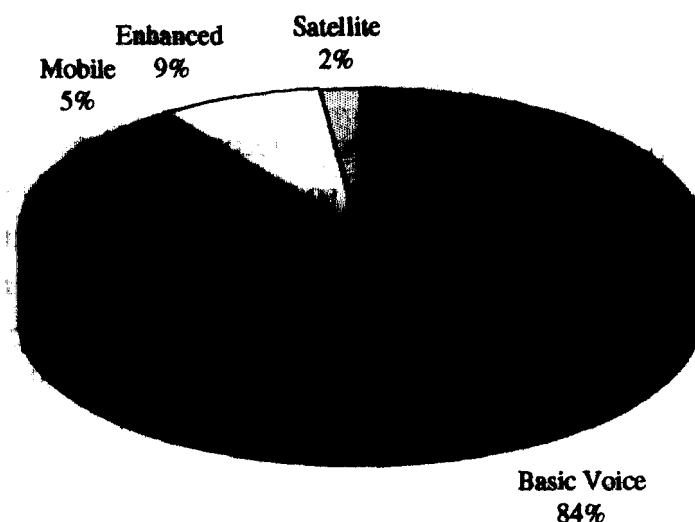
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<sup>1</sup>International Telecommunications Union as reported by John Zarocostas, "Worldwide Telecom Sales Rose by 1.8% Last Year," *Journal of Commerce*, 20 October 1994, p5A. 1994 figure calculated by the Economic Strategy Institute based on regional growth predictions.



satellite services are expected to generate \$25 and \$9.6 billion respectively.<sup>2</sup> Figure 1.1 shows the size and composition of the global telecom market.

**Figure 1.1: Percent of Global Revenue Generated by Telecom Sector.** Source: Enhanced Services data from Office of the United States Trade Representative, memorandum, May 1994, *Telecommunications Services in the Uruguay Round*; Mobile and Satellite services data from "Financial Times Survey: International Telecommunications," *Financial Times*, 18 October 1993, p13.



**Total Value: \$455 billion**

While basic voice telecom services constitute the largest share of the global market, the mobile/cellular and enhanced services sectors are experiencing the greatest annual growth. Global growth in cellular subscribers was 47 percent in 1993, outpacing the five percent growth in fixed-line subscribers.<sup>3</sup> At this pace, by the year 2000 mobile communications will carry more voice traffic worldwide than the traditional wireline network.<sup>4</sup> Worldwide revenues from enhanced services are forecast to grow by \$11 billion in 1995, a 20 percent annual increase.

<sup>2</sup>Office of the United States Trade Representative, memorandum, May 1994, *Telecommunications Services in the Uruguay Round*.

<sup>3</sup>International Telecommunications Union as reported by John Zarocostas, "Worldwide Telecom Sales Rose by 1.8% Last Year," *Journal of Commerce*, 20 October 1994, p5A.

<sup>4</sup>Paul Taylor, "Subscriber Base Now 23 Million," *Financial Times*, 18 October 1993, p 13.